

SN 11/723,075  
Docket No. S-102,315  
In Response to Office Action dated June 27, 2007

RECEIVED  
CENTRAL FAX CENTER

SEP 21 2007

LISTING OF CLAIMS

1. (Original): A hydrocarbon sensor comprising:  
an electrolyte body having a first electrolyte surface with a reference electrode depending therefrom;  
a metal oxide electrode body contained within the electrolyte body and having a first electrode surface coplanar with the first electrolyte surface, wherein the electrolyte body is compressed and sintered about the metal oxide electrode body for intimate contact therebetween.
2. (Original): The hydrocarbon sensor according to Claim 1, where the metal oxide electrode body is formed from  $\text{La}_{1-x}\text{A}_x\text{CrO}_3$ , where A is selected from the group consisting of Sr, Ca, and Mg, and  $0 \leq x \leq 0.5$ .
3. (Original): The hydrocarbon sensor according to Claim 2, where A is Sr and  $x=0.2$ .
4. (Original): The hydrocarbon sensor according to Claim 1, where the electrolyte body is yttria stabilized zirconia with a porosity produced by sintering at a temperature effective to produce a density less than about 81% of theoretical maximum density.

Claims 5-11 (Canceled).